SONY

3-750-716-**21**(1)

Compact Disc Player

Operating Instructions

COMPACT disc DIGITAL AUDIO

CDP-390
CDP-190
CDP-M39
CDP-M19

© 1989 by Sony Corporation

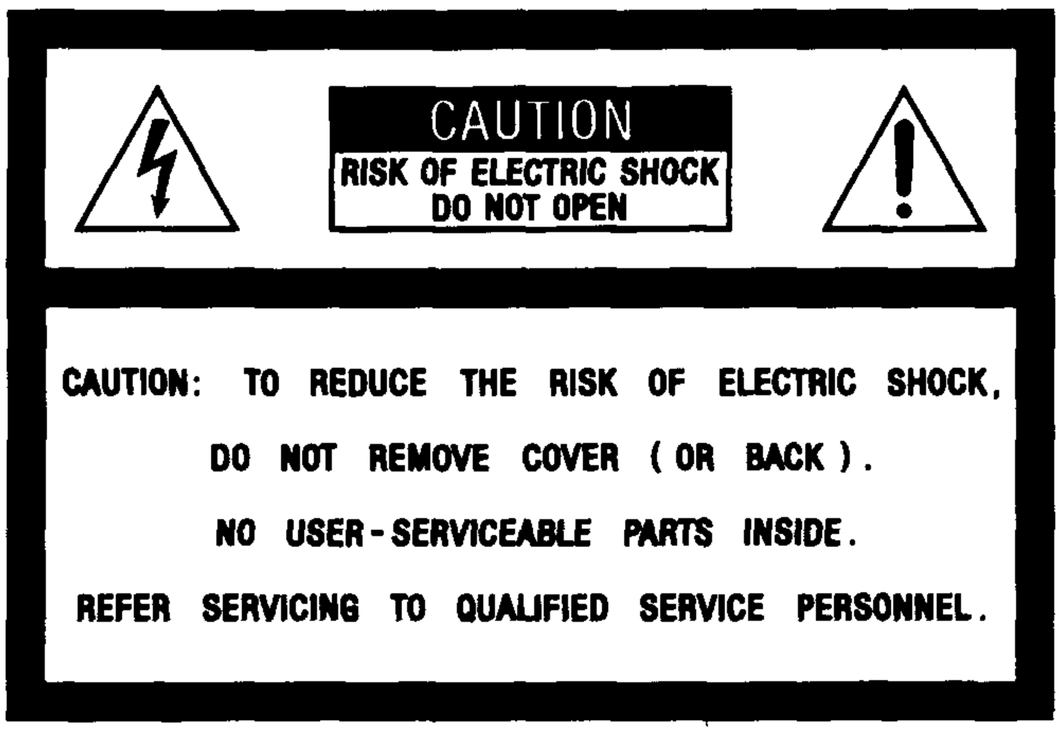
Warning

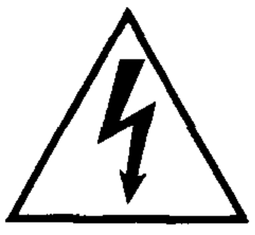
Owner's Record

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna
Relocate the equipment with respect to the receiver
Move the equipment away from the receiver
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

Introducing This CD Player

Playing the beginning of all selections – Music Scan

You can play the first 8 seconds of all selections continuously to decide which selection to play. (page 9)

Enjoy listening in various playing modes

You can select the playing modes among the following:

Program play (page 12)	– Selections are played in your desired order.
Shuffle play (page 11)	– Selections are played in a random order.
Repeat play (page 10)	– One or all selections are played repeatedly.

Table of Contents

Introducing this CD player **3**
Location of controls **4**
Front panel 4
Remote commander 4
Connecting the CD player **5**
Preparing the remote commander **5**

Playing a disc **6**
Locating a particular selection 7
Locating a particular point in a selection 7
Fading in/Fading out 7
Information display 8

Playing the beginning of all selections continuously – Music Scan **9**
Playing repeatedly – Repeat play **10**
Playing in a random order – Shuffle play **11**
Playing in a desired order – Program play **12**

Maintenance **13**
Cleaning your unit 13
Cleaning discs 13
Installing the CD player **13**
Precautions **13**
Specifications **14**
Troubleshooting guide **15**

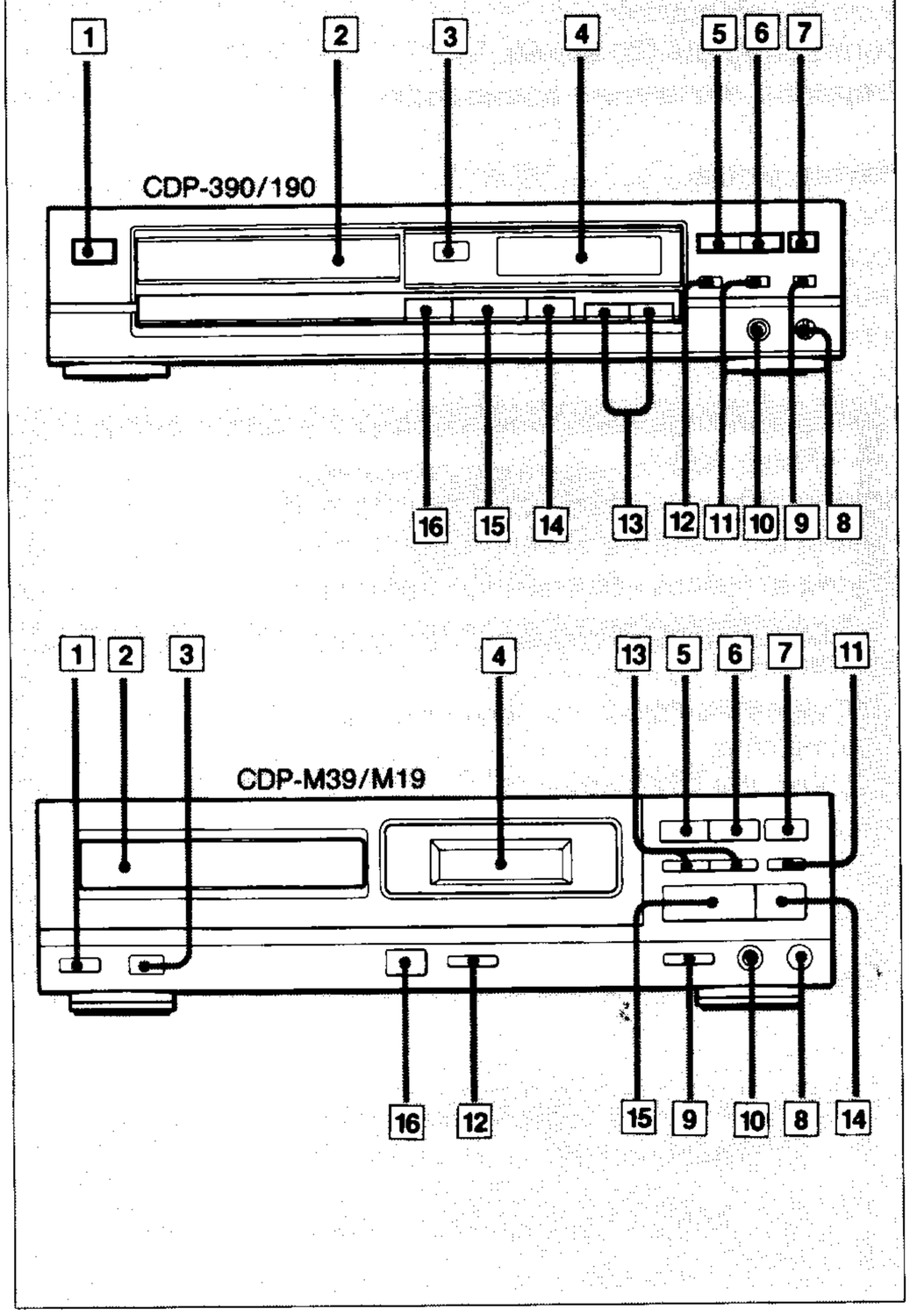
This indicates a function operated only from the remote commander.

This indicates a function operated only on the main unit.

This manual covers four models:
CDP-390, CDP-190, CDP-M39, CDP-M19. The CDP-390 and CDP-190 are full-sized and the CDP-M39 and CDP-M19 are medium sized. The functions on all four are the same except that the CDP-390 and CDP-M39 are supplied with a remote commander. Most of the illustrations used in the manual are those of the CDP-390.

Location of Controls

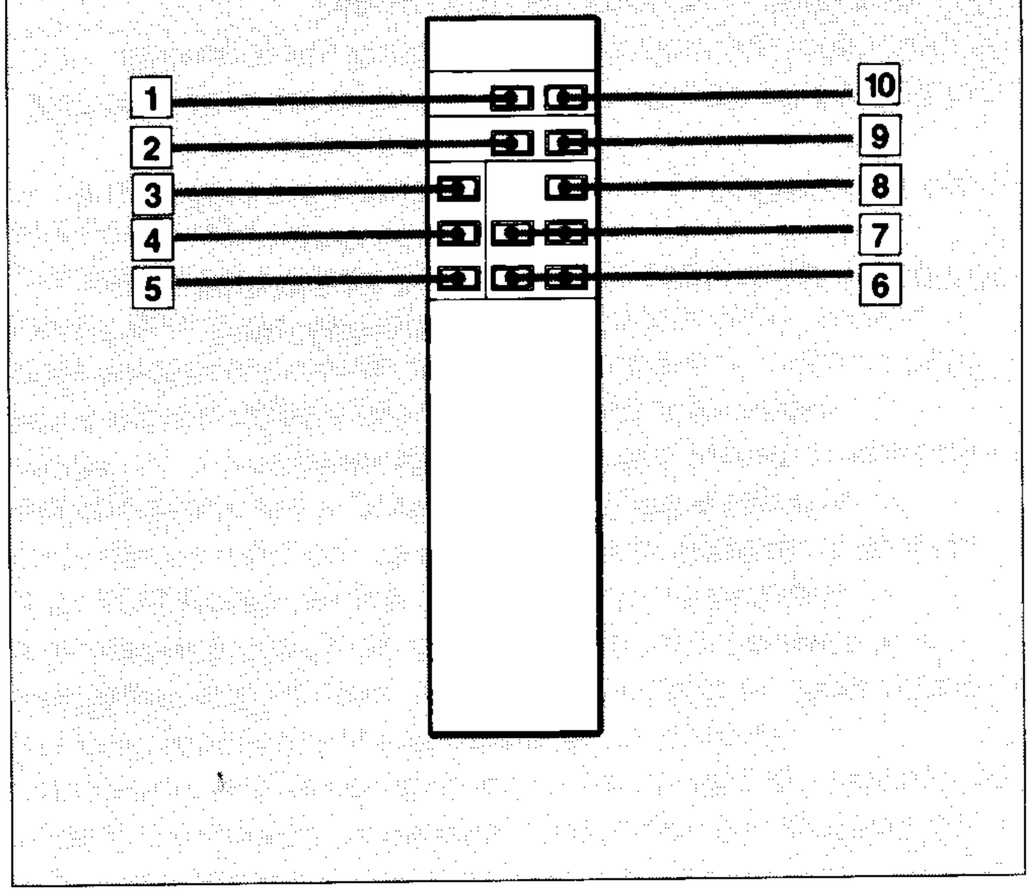
Front Panel



Refer to the pages indicated in ● for details.

1 POWER switch ●6
2 Disc tray ●6
3 Remote sensor ●5
4 Display window ●6
5 PROGRAM button ●12
6 SHUFFLE button ●11
7 REPEAT button ●10
8 (headphone) LEVEL control
9 MUSIC SCAN button ●9
10 PHONES (headphones) jack
11 FADER button ●7
12 TIME button ●8
13 ⏮ ⏭ (AMS*/RMS**)/◀◀ ▶▶ (manual search) buttons ●7
14 ■ (stop)/PGM (program) CLEAR button ●6
15 ▶❚❚ (play/pause) button ●6
16 ⏏ OPEN/CLOSE button ●6

Remote Commander



Refer to the pages indicated in ● for details.

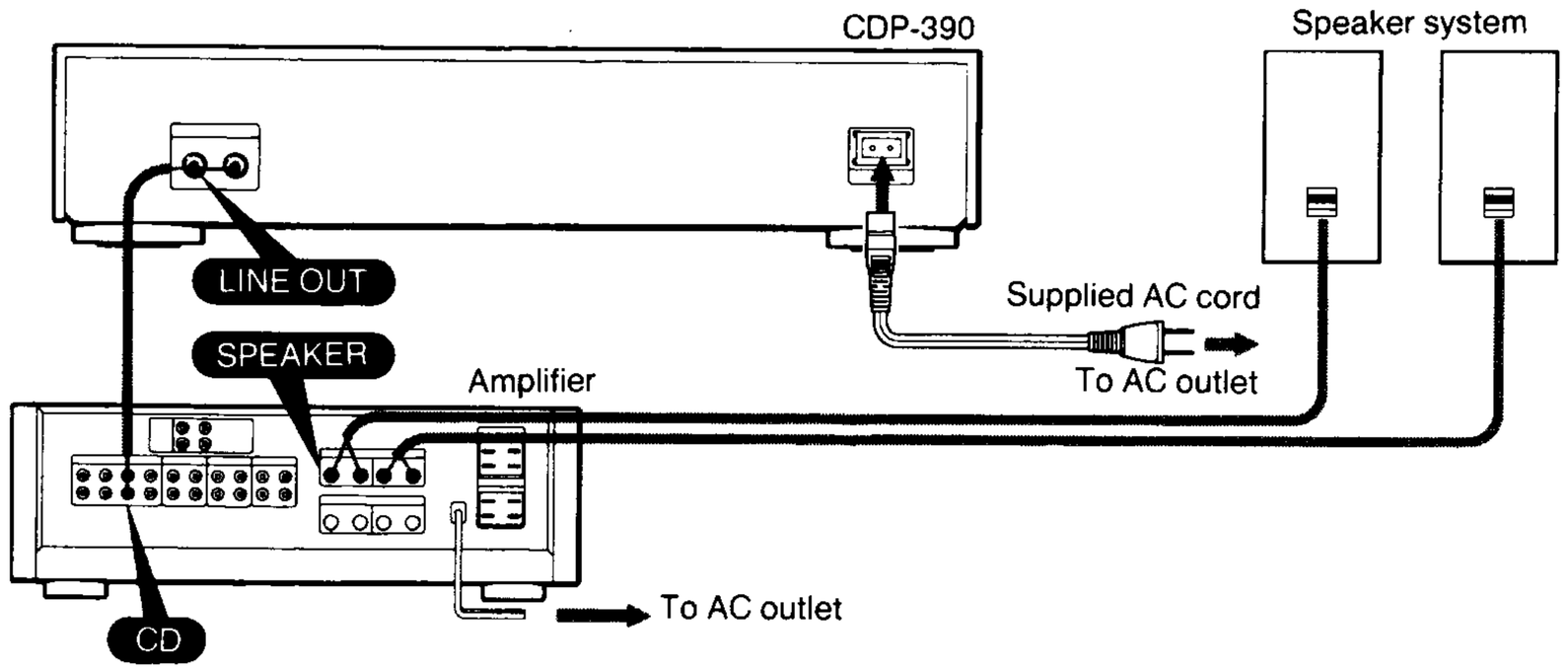
1 PGM (program) button ●12
2 TIME button ●8
3 ▶ (play) button ●12
4 ❚❚ (pause) button ●6
5 ■ (stop) button ●6
6 ◀◀ ▶▶ (manual search) buttons ●7
7 ⏮ ⏭ (AMS*) buttons ●7
8 FADER button ●7
9 REPEAT button ●10
10 SHUFFLE button ●11

*AMS is the abbreviation of Automatic Music Sensor.
**RMS is the abbreviation of Random Music Sensor.

Connecting the CD Player

Notes on Connection

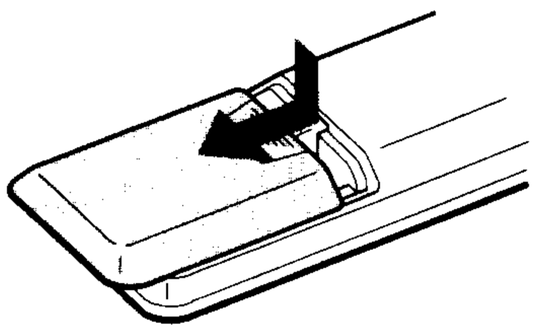
- Turn off the power of each unit before making connections.
- Connect the AC power cord last. Insert the AC power cord firmly into the AC IN jack on the rear panel of the unit before you connect it to an AC outlet.
- Be sure to insert the plugs firmly into the jacks. Loose connection may cause hum and noise.
- Leave a little slack in the connecting cord to allow for inadvertent shock or vibration.
- Cord plugs and jacks are color coded: Red plugs and jacks are for the right channel (R) and white ones for the left channel (L).



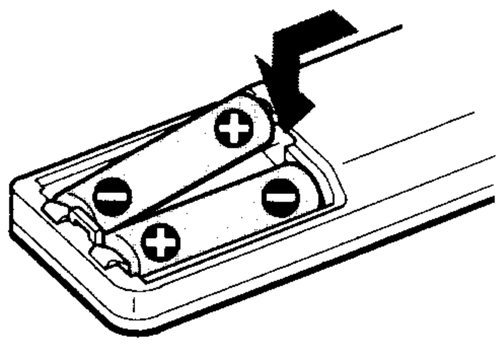
Preparing the Remote Commander

Installing Batteries

1



2 Two size AA (R6) batteries



On battery life

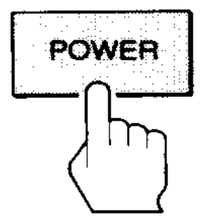
- About half a year of normal operation can be expected when using the Sony SUM-3(NS) batteries.
- When the batteries are run down, the remote commander will not operate the unit. In this case, replace both batteries with new ones.

Notes on the remote commander and remote control operation

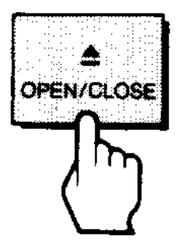
- Keep the commander away from extremely hot or humid places.
- Avoid dropping any foreign objects into the commander casing, particularly when replacing the batteries.
- Avoid exposing the remote sensor to direct sunlight or lighting apparatus. Such exposure can cause a malfunction.
- To avoid damage caused by battery leakage and corrosion, remove the batteries when the commander will not be used for a long time.

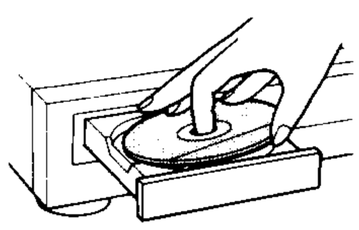
Playing a Disc

1



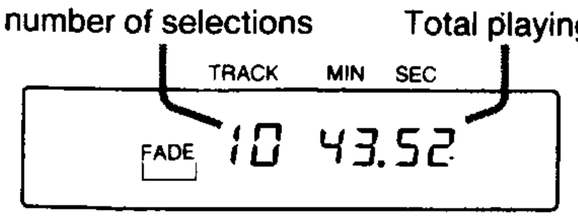
2



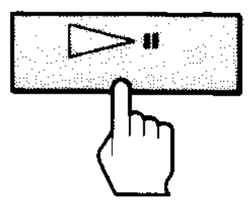


With the printed side up

Total number of selections Total playing time



3



Selection number Elapsed playing time

To stop play
To stop for a moment during play, press ►II (or II on the remote commander).
Press again to resume play.
To stop play, press ■.
To stop play and open the tray, press ⏏.

When using with the stereo system
Turn on the amplifier, and select "CD" of the input selector to listen to the compact disc player.

Caution on adjusting volume
Do not turn up the volume while listening to a portion when very low level inputs or no audio signals. If you do the speakers may be damaged when a peak level portion is played.

If you turn on the power with a disc in the tray
Play begins automatically from the beginning of the disc. By connecting a commercially available timer, disc play can be started at any desired time.

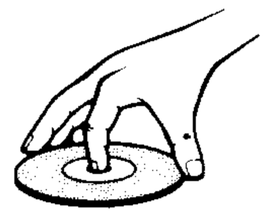
What is this indication?

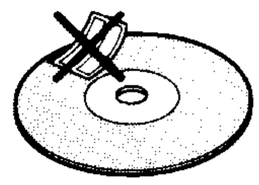
no dISC

This indication appears when there is no disc in the disc tray.

To play a 3-inch (8 cm) CD
Place it on the inner circle of the tray. If the disc is provided with an adaptor, first remove it. Do not put a normal CD (12 cm/5-inch) on top of an 8 cm CD.

Notes on handling discs
- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.





- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in the temperature.
- After playing, store the disc in its case.

Locating a Particular Selection

You can locate the beginning of a desired selection during play or pause.

To locate sequentially

To locate the beginning of the current or preceding selection

- Press ⏮ as many times as required.
- Keep ⏮ pressed to skip selections.
  (Operable during stop only when using the button on the player.)

To locate the beginning of a succeeding selection

- Press ⏭ as many times as required.
- Keep ⏭ pressed to skip selections.
  (Operable during stop only when using the button on the player.)

When you press ⏮ during play
The player locates the beginning of the selection.

Locating a Particular Point in a Selection

You can locate a particular point in the disc during play.

To search quickly while monitoring the sound

To go ahead at high speed
Keep ⏩ pressed during play and release at the desired point.

To go back at high speed
Keep ⏪ pressed during play and release at the desired point.

To search quickly by observing the display
Press ⏸ on the remote commander (or press ⏯), and then keep ⏩ or ⏪ pressed. The search speed will increase, but there will be no sound. Find the desired point by observing the display.
Press ⏸ (or ⏯) again at the desired point.

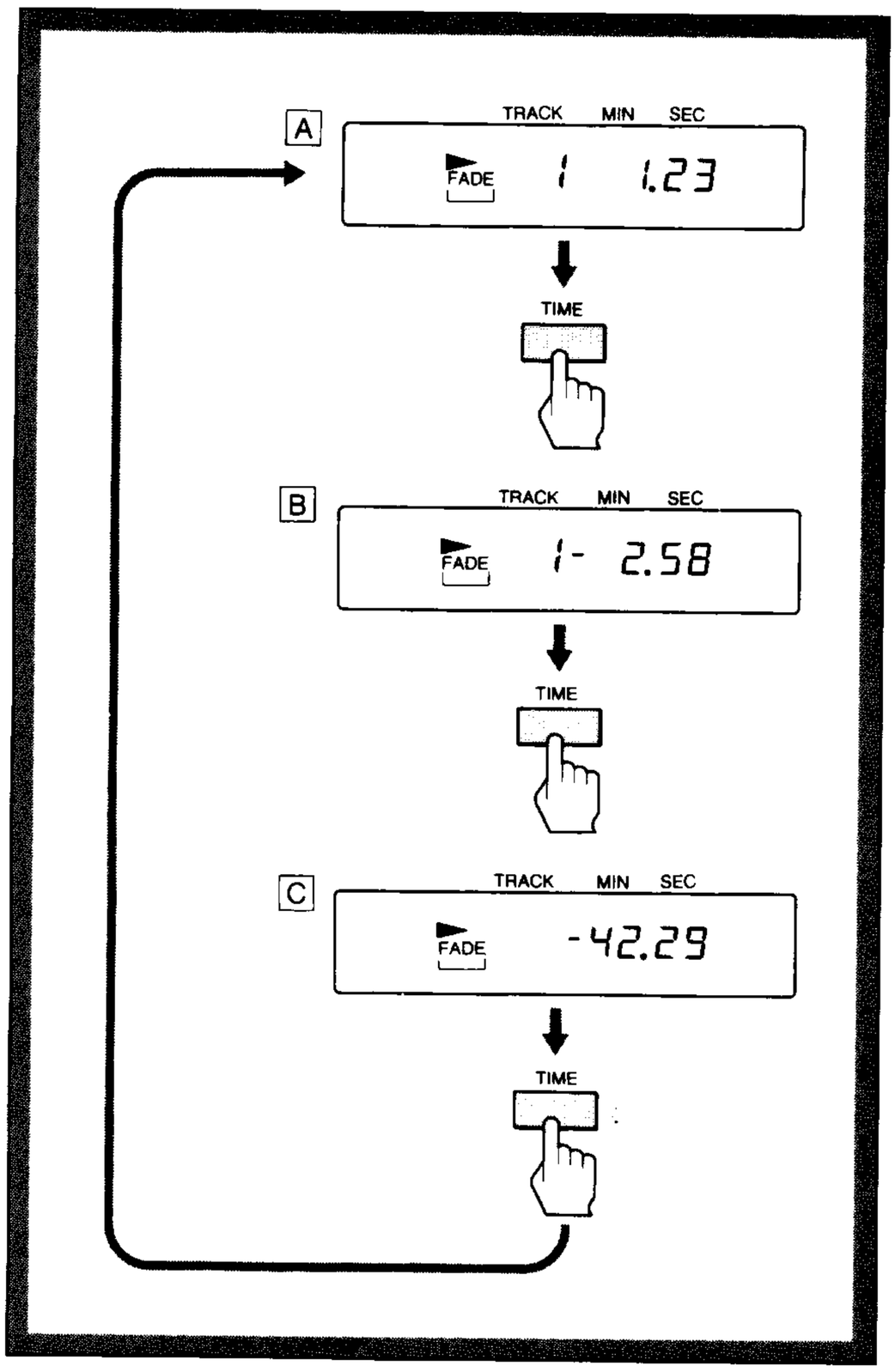
When ר ר is displayed
If you continuously press ⏩ at the end of the disc, ר ר appears in the window. Press ⏪ or ⏮ to return to normal indication.
If you continuously press ⏪ at the beginning of the disc, play begins automatically from the first selection.

Fading in/Fading out

You can have the play fade in and fade out for five seconds.

To end the play fading out
Press FADER when you want to start fading out.
"FADE ▮▮►" flashes in the window, and play fades out for 5 seconds and enters the pause mode.

To restart the play fading in
Press FADER.
"FADE ◄▮▮" flashes in the window, and play fades in for 5 seconds.



Information Display

Each time you press TIME during normal play, Shuffle play, Program play or Music Scan play, the display changes to give you the following information.

A Elapsed playing time

B Remaining time in the current playing selection
If the current selection number is over 20, "– – – –" is displayed.

C Remaining time of the disc
(not displayed during Shuffle play)

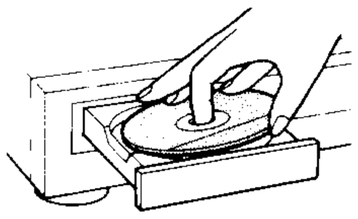
If you press TIME during stop

The total time and total number of selections will be displayed.
If a program is stored, the total number of programmed selections will be displayed.

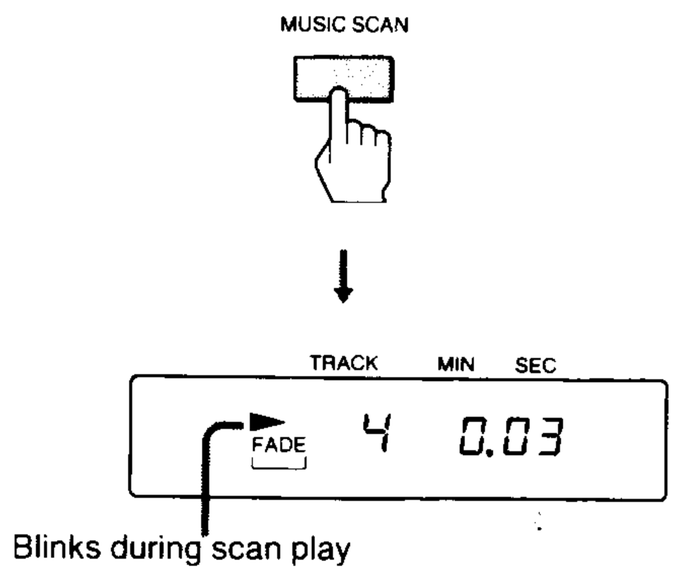
Playing the Beginning of All Selections Continuously – Music Scan

You can play the first 8 seconds of all selections continuously with the MUSIC SCAN button. This is convenient for deciding which selection to play, or to check the order of selections for program play.

1



2



Each selection will be played for 8 seconds and then fades out. After all selections are played, scan play will end.

To play any given selection
Press MUSIC SCAN or ►II (or ► on the remote commander) while it is being played for 8 seconds. ► stops blinking and play will begin.

To skip to other selections
Press I◄◄ or ►►I.

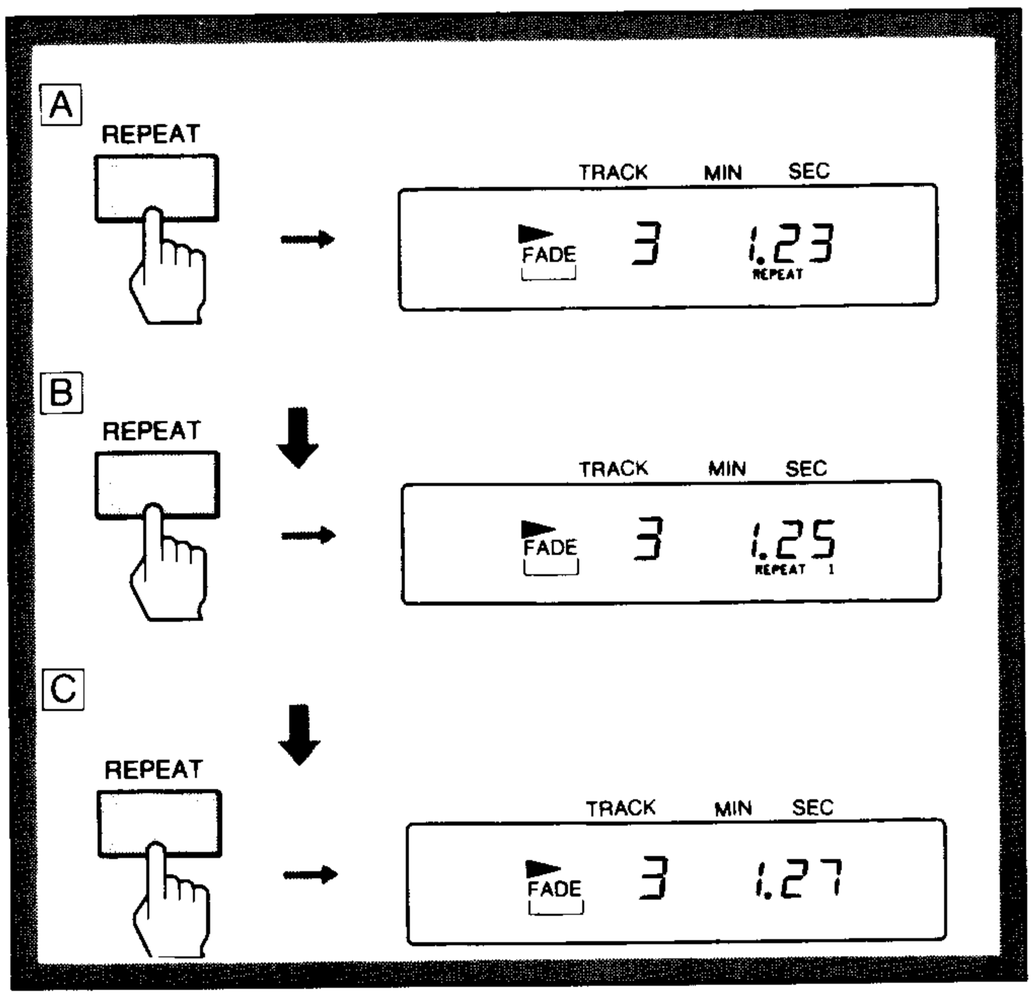
If a program is stored
The selections will be scan played in the programmed order.

If you press FADER during scan play
The selection will fade in or fade out from that point.

Note
Music Scan is not operable when "REPEAT" is displayed. If you press MUSIC SCAN, "REPEAT" will disappear.

Playing Repeatedly – Repeat Play

You can repeat one or all selections during play.



A **To repeat all selections**
Press REPEAT once.
(If you press during Shuffle or Program play, the unit will repeat in that mode.)

B **To repeat the current playing selection**
Press REPEAT again.
(Not operable during Shuffle or Program play.)

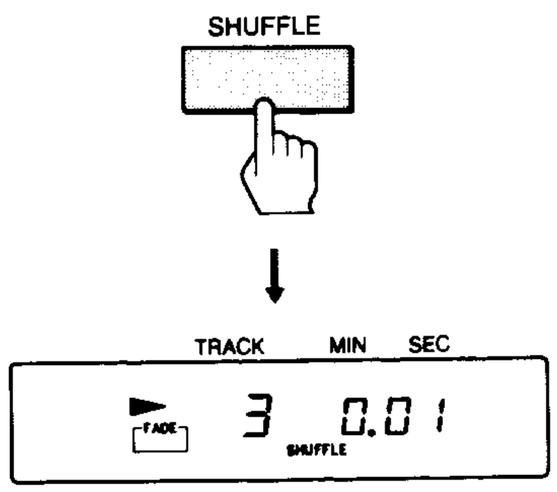
C **To cancel repeat play**
Press REPEAT again.

Playing in a Random Order – Shuffle Play

You can play all the selections in a random order.

1

2



When all selections are played once, shuffle play will end.

To stop playing
Press ■.

To cancel shuffle play
Press SHUFFLE ("SHUFFLE" disappears from the window) to enter the unit into the normal playing mode.

If you press SHUFFLE during play
Shuffle play begins after the current selection is over.

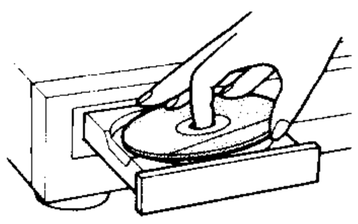
If you press REPEAT during shuffle play
Shuffle play will be repeated in a different order. (Repeating one selection only is not possible during shuffle play.)

What is this indication?
This indication appears while the player is "shuffling" the selections.

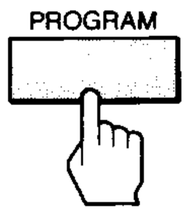
Playing in a Desired Order – Program Play

You can make a program by designating up to 20 selections in the order you want them to be played. The unit will play the disc according to your program.

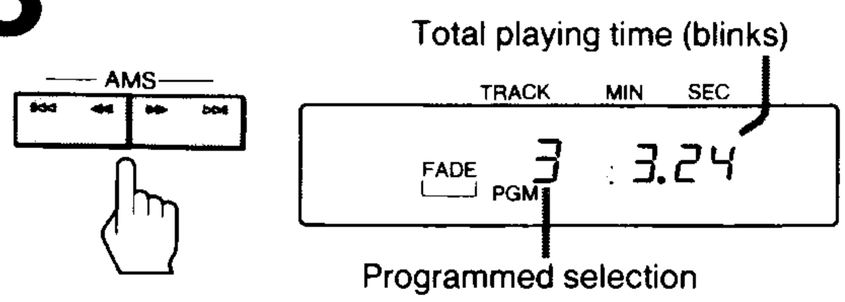
1



2

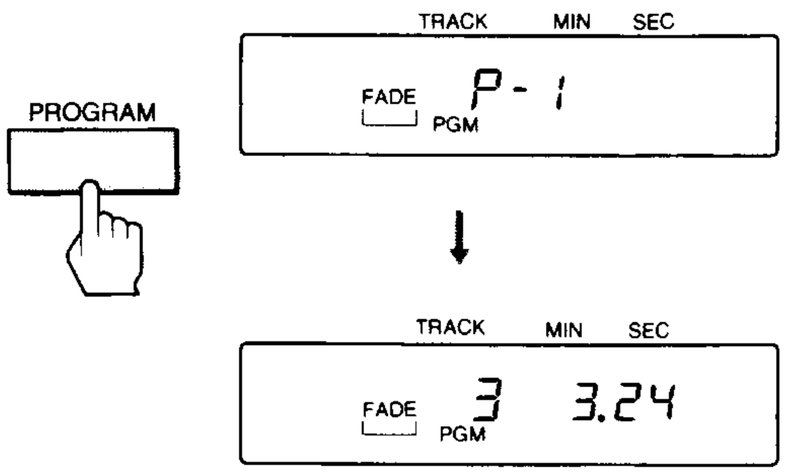


3 Choose selection and check the time



4 If satisfactory go to the next step.
If not, repeat step 3 and choose another selection.

5 Store selection.



6 Repeat steps 3 to 5.

To play the program
Press ►II (or ► on the remote commander).

To stop playing
Press ■.
You can play the same program repeatedly as long as you do not cancel program play or erase the program.

To cancel program play
Press PROGRAM to enter the unit into the normal playing mode. The program will be erased.

To check you program
Press II on the remote commander (or press ►II) to enter the unit into the pause mode, and then press ►►I to check each programmed selection.

To erase your program
Each time you press ■, the last selection will be erased.
Press ⏏ to erase the entire program.

If "----" is displayed instead of the actual time
– you have programmed a selection number over 20.
– the total time has exceeded 100 minutes.

Note:
You cannot make a program during play.

If you press REPEAT during program play
The program will be repeated after all the programmed selections are played once.
(Repeating one selection only is not possible during program play.)

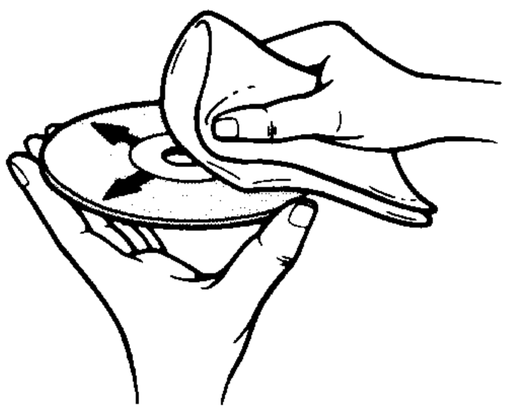
Maintenance

Cleaning Your Unit

Clean the cabinet, panel and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

Cleaning Discs

When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center out.



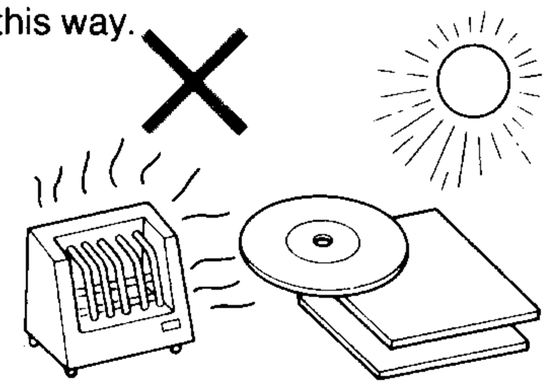
Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

Installing the CD Player

Notes on Installation

- Place the unit in a location with adequate air circulation to prevent internal heat build up in the unit.
- Do not place the unit on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not install the unit:
  – near heat sources such as radiators or air ducts.
  – in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

Not this way.



On moisture condensation
If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the unit. Should this occur, the player will not operate. In this case, remove the disc and leave the player turned on for about an hour until the moisture evaporates.

Precautions

On safety
- Operate the unit only on 120 V AC, 60 Hz.
- Should any liquid or solid object fall into the cabinet. Unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it will not be used for a long time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

On operation
When the unit is not used, turn the power off, to conserve energy and to extend the useful life of your unit.

Important
Since the CD system boasts a wide dynamic range, the peaks of high level inputs are recorded with high fidelity, and the noise level is very low.
Do not turn up the volume while listening to a portion with no audio signals or very low level inputs if you do, the speakers may be damaged when a peak level portion played.

For detailed safety precautions, see the leaflet "IMPORTANT SAFEGUARDS".

If you have any questions or problems concerning your unit, please contact you nearest Sony dealer.

Specifications

Compact disc player

Frequency response	2 Hz – 20 kHz $\pm \frac{1.0}{1.2}$ dB
Signal to noise ratio	More than 93 dB
Dynamic range	More than 90 dB
Harmonic distortion	Less than 0.05 %
Channel separation	More than 90 dB

Outputs

LINE OUT (phono jacks)	Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms
PHONES (stereo phone jack)	Output level max. 14 mW Load impedance 32 ohms

General

	CDP-390/ CDP-190	CDP-M39/ CDP-M19
Power requirements	120 V AC, 60 Hz	
Power consumption	8 W	8 W
Dimensions (approx., including projections)	430 × 100 × 280 mm (w/h/d) (17 × 4 × 11 1/8 inches)	355 × 95 × 300 mm (w/h/d) (14 × 3 3/4 × 11 7/8 inches)
Weight (approx.)	3 kg (6 lbs 10 oz)	2.8 kg (6 lbs 3 oz)

Supplied accessories

	CDP-390/ CDP-M39	CDP-190/ CDP-M19
AC power cord	1	
Audio cord	1 (2 phono plugs – 2 phono plugs)	
Remote commander	1	—
Sony SUM-3(NS) batteries	2	—

Remote commander

Remote control system	Infrared control
Power requirements	3 V DC with two R6 (size AA) batteries
Dimensions	Approx. 43 × 20 × 175 mm (w/h/d) (1 3/4 × 13/16 × 7 inches)
Weight	Approx. 100 g (3.6 oz) Including batteries

Design and specifications subject to change without notice.

Optional accessory
Remote commander for CDP-190/M19 RM-D90

Troubleshooting Guide

Before going through the check list below, first refer back to the connections and operating procedures.
Should any problem persist after you have made these checks, consult your nearest Sony service facility.

Symptom	Cause	Remedy
The disc tray does not close.	The disc is not placed correctly.	Place the disc correctly on the disc tray.
Play does not start.	Dirty disc.	Clean the disc.
	The disc is inserted upside down.	Insert the disc with the printed side up.
	The player is in the pause mode.	Press ►II (or II on the remote commander) to release pause.
	Moisture condensation.	Leave the player turned on for approximately one hour.
"NO DISC" displayed	There is no disc in the unit.	Insert a disc.
Sound is not heard.	Loose connection.	Insert the plug firmly.
	Connection is incorrect.	Check the connection referring to "Connecting the CD Player".
	The LEVEL control is set to the minimum.	Turn the control clockwise.
ר ר is displayed when you press ►►.	►► was continuously pressed at the end of the disc.	Press ◄◄ or I◄◄ to return to normal indication.
The remote commander does not operate the unit.	The batteries are run down.	Replace both batteries.
	The remote commander is not pointed at the remote sensor.	Point the remote commander at the sensor.
	There is an obstacle between the remote commander and the unit.	Remove the obstacle.
	The remote commander is too far from the unit.	Move closer.
Any operation is not possible.	The internal control program may not run.	Turn off the power and turn it on again.